



PATENT  
Customer No. 22,852  
Attorney Docket No. 08790.0012

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: )  
 )  
John P. DONOGHUE et al. ) Group Art Unit: 1614  
 )  
Application No.: 10/798,919 ) Examiner: Unassigned  
 )  
Filed: March 12, 2004 )  
 )  
For: NEUROLOGICAL EVENT )  
MONITORING AND THERAPY )  
SYSTEMS AND RELATED )  
METHODS )

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

**INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97(b)**

Pursuant to 37 C.F.R. §§ 1.56 and 1.97(b), Applicants bring to the attention of the Examiner the documents on the attached IDS Form PTO/SB/08. This Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits for the above-referenced application.

Copies of the listed foreign patent documents and non-patent literatures are attached. Copies of the U.S. patents and published U.S. patent applications are not enclosed.

Applicants respectfully request that the Examiner consider the listed documents and indicate that they were considered by making appropriate notations on the attached IDS Form.

This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that each or all of the listed documents are material or constitute "prior art." If the Examiner applies any of the documents as prior art against any claim in the application and Applicants determine that the cited documents do not constitute "prior art" under United States law, Applicants reserve the right to present to the Patent Office the relevant facts and law regarding the appropriate status of such documents.

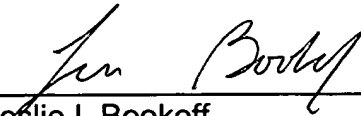
Applicants further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

If there is any fee due in connection with the filing of this Statement, please charge the fee to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.

Dated: December 27, 2004

By:   
Leslie I. Bookoff  
Reg. No. 38,084

IDS Form PTO/SB/08: Substitute for form 1449A/PTO <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (Use as many sheets as necessary)			<b>Complete if Known</b>	
Sheet 1 of 9			Application Number 10/798,919	
			Filing Date March 12, 2004	
			First Named Inventor John P. DONOGHUE	
			Art Unit 1614	
			Examiner Name Unassigned	
			Attorney Docket Number 08790.0012	

U.S. PATENTS AND PUBLISHED U.S. PATENT APPLICATIONS					
Examiner Initials	Cite No. <sup>1</sup>	Document Number	Issue or Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
		US-2001/0023368	9/20/2001	Black et al.	
		US-2001/0027336	10/4/2001	Gielen et al.	
		US-2001/0029391	10/11/2001	Gluckman et al.	
		US-2001/0051819	12/13/2001	Fischell et al.	
		US-2001/0056290	12/27/2001	Fischell et al.	
		US-2002/0002390	1/3/2002	Fischell et al.	
		US-2002/0013612	1/31/2002	Whitehurst	
		US-2002/0016638	2/7/2002	Mitra et al.	
		US-2002/0077620	6/20/2002	Sweeney et al.	
		US-2002/0099412	7/25/2002	Fischell et al.	
		US-2002/0169485	11/14/2002	Pless et al.	
		US-2003/0082507	5/1/2003	Stypulkowski	
		US-2003/0083716	5/1/2003	Nicolelis et al.	
		US-2003/0093129	5/15/2003	Nicolelis et al.	
		US-3,837,339	9/24/74	Aisenberg et al.	
		US-3,850,161	11/26/1974	Liss	
		US-4,055,175	10/25/1977	Clemens et al.	
		US-4,146,029	3/27/1979	Ellinwood, Jr.	
		US-4,294,245	10/13/1981	Bussey	
		US-4,360,031	11/23/1982	White	
		US-4,461,304	7/24/1984	Kuperstein	
		US-4,633,889	1/6/1987	Talalla et al.	
		US-4,690,142	9/1/1987	Ross et al.	
		US-4,837,049	6/6/1989	Byers et al.	
		US-4,865,048	9/12/1989	Eckerson	
		US-4,878,913	11/7/1989	Aebischer et al.	
		US-4,883,666	11/28/1989	Sabel et al.	
		US-4,969,468	11/13/1990	Byers et al.	
		US-5,037,376	8/6/1991	Richmond et al.	

Examiner Signature		Date Considered	
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		US-5,081,990	1/21/1992	Deletis	
		US-5,119,832	6/9/1992	Xavier	
		US-5,156,844	10/20/1992	Aebischer et al.	
		US-5,215,088	6/1/1993	Normann et al.	
		US-5,325,865	7/5/1994	Beckman et al.	
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		US-5,445,608	8/29/1995	Chen et al.	
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		US-5,702,432	12/30/1997	Chen et al.	
		US-5,713,923	2/3/1998	Ward et al.	
		US-5,735,885	4/7/1998	Howard, III et al.	
		US-5,758,651	6/2/1998	Nygard et al.	
		US-5,797,898	8/25/1998	Santini, Jr. et al.	
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		US-5,843,093	12/1/1998	Howard, III	
		US-5,843,142	12/1/1998	Sultan	
		US-5,855,801	1/5/1999	Lin et al.	
		US-5,873,840	2/23/1999	Neff	
		US-5,928,228	7/27/1999	Kordis et al.	
		US-5,938,688	8/17/1999	Schiff	
		US-5,938,689	8/17/1999	Fischell et al.	
		US-5,938,690	8/17/1999	Law et al.	

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		US-6,001,065	12/14/1999	DeVito	
		US-6,006,124	12/21/1999	Fischell et al.	
		US-6,016,449	1/18/2000	Fischell et al.	
		US-6,024,700	2/15/2000	Nemirovski et al.	
		US-6,024,702	2/15/2000	Iversen	
		US-6,027,456	2/22/2000	Feler et al.	
		US-6,038,477	3/14/2000	Kayyali	
		US-6,061,593	5/9/2000	Fischell et al.	
		US-6,086,582	6/11/2000	Altman et al.	
		US-6,091,015	7/18/2000	del Valle et al.	
		US-6,092,058	7/18/2000	Smyth	
		US-6,113,553	9/5/2000	Chubbuck	
		US-6,125,300	9/26/2000	Weijand et al.	
		US-6,128,538	10/3/2000	Fischell et al.	
		US-6,134,474	10/17/2000	Fischell et al.	
		US-6,154,678	11/28/2000	Lauro	
		US-6,161,045	12/12/2000	Fischell et al.	
		US-6,163,725	12/19/2000	Peckham et al.	
		US-6,169,981	1/2/2001	Werbos	
		US-6,171,239	1/9/2001	Humphrey	
		US-6,175,762	1/16/2001	Kirkup et al.	
		US-6,181,965	1/30/2001	Loeb et al.	
		US-6,185,455	2/6/2001	Loeb et al.	
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		US-6,224,549	5/1/2001	Drongelen	
		US-6,240,315	5/29/2001	Mo et al.	
		US-6,254,536	7/3/2001	DeVito	
		US-6,263,237	7/17/2001	Rise	
		US-6,280,394	8/28/2001	Maloney et al.	

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		US-6,309,410	10/30/2001	Kuzma et al.	
		US-6,313,093	11/6/2001	Frey, II	
		US-6,319,241	11/20/2001	King et al.	
		US-6,353,754	3/5/2002	Fischell et al.	
		US-6,354,299	3/12/2002	Fischell et al.	
		US-6,356,784	3/12/2002	Lozano et al.	
		US-6,358,202	3/19/2002	Arent	
		US-6,360,122	3/19/2002	Fischell et al.	
		US-6,427,086	7/30/2002	Fischell et al.	
		US-6,436,708	8/20/2002	Leone et al.	
		US-6,459,936	10/1/2002	Fischell et al.	
		US-6,466,822	10/15/2002	Pless	
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		US-6,480,743	11/12/2002	Kirkpatrick et al.	
		US-6,620,415	9/16/2003	Donovan	

Note: Copies of the U.S. Patent Documents are not Required in IDS filed after October 21, 2004

FOREIGN PATENT DOCUMENTS						
Examiner Initials	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Translation <sup>6</sup>
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
		WO 01/43635	6/21/2001	Partha		
		WO 03/035165	May 1, 2003	Nicolelis et al.		
		WO 03/037231	May 8, 2003	Nicolelis et al.		

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		Kensall D. Wise et al., "An Integrated-Circuit Approach to Extracellular Microelectrodes," IEEE Transactions on Biomedical Engineering, Vol. BME-17, No. 3, July 1970, pp 238-247		
		Donald R. Humphrey et al., "Predicting Measures of Motor Performance from Multiple Cortical Spike Trains," Science, New Series, Volume 170, Issue 3959, November 13, 1970, pp 758-762		
		A. Bohg, "Ethylene Diamine-Pyrocatechol-Water Mixture Shows Etching Anomaly in Boron-Doped Silicon," Journal of the Electrochemical Society, Vol. 118, No. 2, February 1971, pp 401-402		
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		Anthony L. Owens et al., "Multi-electrode array for measuring evoked potentials from surface of ferret primary auditory cortex," Journal of Neuroscience Methods, Vol. 58, Nos. 1/2, May 1995, pp 209-220		
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		D.M. Halliday et al., "A Framework for the Analysis of Mixed Time Series/Point Process Data-Theory and Application to the Study of Physiological Tremor, Single Motor Unit Discharges and Electromyograms," Progress in Biophysics Molecular Biology, Vol. 64, Nos. 2/3, 1995, pp 237-278		
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		Patrick K. Campbell et al., "A chronic intracortical electrode array: Preliminary results," Journal of Biomed. Material Res.: Applied Biomaterials, Vol. 23, No. 2, 1989, pp 245-259		
		Andrew R. Mitz et al., "Learning-dependent Neuronal Activity in the Premotor Cortex: Activity during the Acquisition of Conditional Motor Associations," The Journal of Neuroscience, Vol. 11, No. 6, June 1991, pp 1855-1872		

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		Patrick K. Campbell et al., "A Silicon-Based, Three-Dimensional Neural Interface: Manufacturing Processes for an Intracortical Electrode Array," IEEE Transactions, 1991, pp 758-768		
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		Reinhard Eckhorn et al., "A new method for the insertion of multiple microprobes into neural and muscular tissue, including fiber electrodes, fine wires, needles and microsenors," Journal of Neuroscience Methods, Vol. 49, Nos. 1/2, 1993, pp 175-179		
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		P. Nisbet, "intergrating assistive technologies: current practices and future possibilities," Med. Eng. Phys., Vol. 18, No. 3, 1996, pp 193-202		
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		TR Scott et al., "The Monitoring of Tendon Tension with an Implantable Intratendon Probe and Its Use in the Control of Neuroprostheses," IEEE Transactions on Rehabilitation Engineering, Vol. 5, No. 2, June 1997, pp 233-235		
		Barbara M. Faggin et al., "Immediate and simultaneous sensory reorganization at cortical and subcortical levels of the somatosensory system," Proc. Natl. Acad. Science USA, Vol. 94, August 1997, pp 9428-9433		
		Nicolelis, Miguel A.L., "Trigeminal System Plasticity During Facial Anesthesia," Department of Health and Human Services, Public Health Service, Grant No. 2 R01 DE11451-05, Including Summary Statement, October, 1997		
		Robert M. Bradley et al., "Long term chronic recordings from peripheral sensory fibers using a sieve electrode array," Journal of Neuroscience Methods, Vol. 73, 1997, pp 177-186		
		David K. Warland et al., "Decoding Visual Information From a Population of Retinal Ganglion Cells," The American Physiological Society, 1997, pp 2336-2350		
		Steven P. Wise et al., "Premotor and Parietal Cortex: Corticocortical Connectivity and Combinatorial Computations," Annual Review of Neuroscience, Vol. 20, 1997, pp 25-42		
		P.R. Kennedy et al., "Restoration of neural output from a paralyzed patient by a direct brain connection," NeuroReport, Vol. 9, No. 8, June 1998 pp 1707-1711		

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Examiner Signature		Date Considered	
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				Application Number	10/798,919
				Filing Date	March 12, 2004
				First Named Inventor	John P. DONOGHUE
				Art Unit	1614
				Examiner Name	Unassigned
Sheet	8	of	9	Attorney Docket Number	08790.0012

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		Nature Reviews, Neuroscience, Vol. 4, May 2003, pp. 417-422	
		Libet, Benjamin, "Unconscious Cerebral Initiative and the Role of Conscious Will in Voluntary Action," The Behavioral and Brain Sciences 1995) 8, pp. 529-566	

<sup>1</sup> Applicant's unique citation designation number (optional).

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